

## REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. Applicant respectfully requests that the foregoing amendments be entered at least because all the limitations of new claim 10 were in original dependent claim 7, and thus the addition of claim 10 raises no new issues requiring further search or consideration.

Claim 7 has been amended in a minor way without narrowing its scope. New claim 10 is being added. Support for new claim 10 can be found at least in original claim 7. No new matter has been added.

This amendment changes and adds a claim in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-10 are now pending in this application.

### *Examiner Interview*

Applicant appreciates the courtesies extended by Examiner Gibbs in the personal interview of November 30, 2005. Applicant's representative, Thomas G. Bilodeau, explained to Examiner Gibbs that U.S. Patent No. 5,892,595 to Yamakawa et al. ("Yamakawa") does not disclose the control section as recited in any of the independent claims 1, 2 or 5, and the claims were patentable thereover for at least this reason. Applicant's representative further explained to the Examiner with respect to claim 2 that Yamakawa does not disclose "a shading plate having a shading pattern formed thereon for performing shading correction, said reference position pattern element being formed on said shading plate at a portion thereof unprovided with said shading pattern", or with respect to claim 5, "wherein said control section reads said reference position pattern element by first moving said image reading carriage a predetermined distance forwardly in an auxiliary scanning direction and then moving it rearwardly." Examiner Gibbs stated that she would consider these arguments if

they were provided in a response to the outstanding Office Action. Accordingly, applicant provides appropriate arguments below.

***Rejection under 35 U.S.C. § 102***

Claims 1-9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,892,595 to Yamakawa et al. (hereafter “Yamakawa”). Applicant respectfully traverses this rejection for at least the following reasons.

As discussed in the Amendment and Reply filed on May 26, 2005, Yamakawa fails to suggest at least the feature of claim 1 of “a control section for detecting a reference position based on the reference position pattern element thus read and setting said image reading carriage at a prescribed position based on the reference position thus detected.” (emphasis added). For at least this reason, Yamakawa fails to anticipate or render obvious independent claim 1.

Yamakawa discloses an image reading apparatus including a reference pattern having slanting lines (abstract). A reference-position determining unit detects one of the slanting lines in the reference pattern based on image data output from one of a number of image sensors so that a position of the image data when one of the slanting lines is detected is determined as a reference position (abstract). First and second line correcting units output image data having color values at a corrected position of each picture element based in part on the reference position (abstract). Thus, the purpose of the reference pattern in Yamakawa is to allow for outputting image data, where the position of the color values of each picture element is corrected based on the reference pattern.

Yamakawa, in contrast to claim 1, does not disclose or suggest setting an image reading carriage at a prescribed position based on a reference position detected based on a reference position pattern element. Yamakawa uses its determined reference position to correct the positions of output image data, not to set an image reading carriage at a prescribed position. Thus, Yamakawa fails to anticipate or render obvious claim 1.

The Office Action states on page 2: “Applicant argues ‘Yamakawa fails to suggest setting an image reading carriage at a prescribed position based on a reference position’”, and

cites to Yamakawa at col. 13, lines 15-22, col. 15, lines 52-57, and col. 30, lines 50-67. Initially, applicants would like to make clear that its position is that Yamakawa does not set an image reading carriage at a prescribed position based on a reference position detected based on a reference position pattern element. Moreover, the cited sections of Yamakawa do not suggest the features of claim 1. These cited sections respectively disclose that (1) color component values are determined based on the determined reference position, (2) position deviation of the color components values are detected based on a reference pattern read out by R, G and B image sensors, and (3) a pickup 334, which is arranged on a carriage along with image sensors, is used to provide a measure of the variation of the sub-scanning speed of the image sensors. Significantly, what these sections of Yamakawa do not disclose is setting Yamakawa's carriage with image sensors at a prescribed position based on any determined reference position. Instead, Yamakawa discloses using its determined reference position to correct the positions of output image data.

Independent claims 2 and 5 includes all the limitations of claim 1, and thus are patentable over Yamakawa for at least the same reasons. Furthermore, claims 2 and 5 recite additional patentable features. Claim 2 recites "a shading plate having a shading pattern formed thereon for performing shading correction, said reference position pattern element being formed on said shading plate at a portion thereof unprovided with said shading pattern." Yamakawa also fails to disclose this feature of claim 2. The Office Action cites to Figures 23 and 26, and col. 25, lines 54-62, col. 26, lines 22-34 and col. 27, lines 20-27 of Yamakawa as disclosing the features of claim 2. The cited sections of Yamakawa, however, fail to disclose the features of claim 2. Figure 26, for example, merely shows a correction unit 322 that provides shading correction to an error correcting part 324 of the Yamakawa device, while Figure 23A merely shows an image of slanting lines of a reference pattern. The cited portions of Yamakawa, however, do not disclose a shading plate with a shading pattern, much less a shading plate with a reference position pattern element being formed thereon in addition to a shading pattern.

Claim 5 recites "wherein said control section reads said reference position pattern element by first moving said image reading carriage a predetermined distance forwardly in an auxiliary scanning direction and then moving it rearwardly." (emphasis added). Yamakawa

also fails to disclose this feature of claim 5. The Office Action cites to Figure 23, col. 25, lines 54-62, and col. 26, lines 13-34 of Yamakawa as disclosing the features of claim 5. The cited sections of Yamakawa, however, do not disclose moving an image reading carriage forwardly in an auxiliary scanning direction and then moving it rearwardly. As shown in Figure 23 of Yamakawa, the error measurement window is not moved rearwardly in the sub-scanning (auxiliary scanning) direction. Thus, claim 5 is further patentable over Yamakawa for this reason.

The dependent claims are patentable for at least the same reasons as their respective independent claims, as well as for further patentable features recited therein. For example, new claim 10 (claim 7 also includes this feature) recites “wherein said control section detects the reference position by reading said reference position pattern element by means of said image reading carriage, and makes said image reading carriage move a prescribed distance from said reference position to an image reading start position.” (emphasis added). Yamakawa fails to disclose any controller that makes an image reading carriage move a prescribed distance from a detected reference position to a starting position. Yamakawa is concerned with using its determined reference position to correct the positions of output image data, not to moving a carriage to a reading starting position a prescribed distance for the determined reference position.

Dependent claims 8 and 9 respectively recite “wherein said reference position pattern element comprises at least two reference position patterns arranged beyond opposing sides of the shading pattern” and “wherein said reference position pattern element comprises at least two reference position patterns arranged beyond a same side of the shading pattern”, features not taught or suggested by Yamakawa.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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By Thomas G. Bilodeau

FOLEY & LARDNER LLP  
Customer Number: 22428  
Telephone: (202) 945-6162  
Facsimile: (202) 672-5399

Pavan K. Agarwal  
Registration No. 40,888

Thomas G. Bilodeau  
Registration No. 43,438

Attorneys for Applicant